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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/475,719	12/30/1999	W. LEO HOARTY	1436/139	6764

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EXAMINER	
HUYNH, SON P	

ART UNIT	PAPER NUMBER
2611	14

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/475,719	HOARTY, W. LEO	
	Examiner	Art Unit	
	Son P Huynh	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Terminal Disclaimer

2. The terminal disclaimer filed on 07/10/2003 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of Patent No. 5,526,034 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1- 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paik et al. (US 5,136,411) and in view of Hendricks US 6,557,173).

Regarding claim 1, Paik discloses a CATV system comprises headend terminal 10, distribution terminal 12 and subscriber terminal 14 (see figure 1). Head end terminal 12 comprises multiple source signals conditioning unit 26 connected parallel with digital switch 40 in transmission unit 28. The source signal-conditioning unit 26 receives signals from signal sources 32 and control data from control computer 30. Users request services using remote control unit 114, the service request signals are stored in microcomputer 102 and then transmitted upstream to the transmit unit 28 in the head end terminal via coaxial cables 18 and distribution terminal 12. PIN-FET receiver 52 in the transmission unit receives the service request signals and sends to channel selection controller 56 via data detector 54. The channel selection controller 56 responds dynamically to the received service request signals by controlling the digital switch 40 and the control computer 30 so that the digital switch 40 interconnects the source signal conditioning unit 26 providing the television signal indicated by the service request signal received from a given subscriber terminal 14 with the upconverter 42 that frequency positions the television signal within the composite signal for transmission to the given subscriber terminal 14 via cables 18. The composite signal is received by the programmable FM tuner 96 and then provided to signal processor 100 via FM demodulator 98. The signal processor 100 extract the control data in the television signal and provides the control data to microcomputer to determine whether the extracted control data contains control signal enables the subscriber terminal to receive the television signal in the frequency channel to which the tuner 96 is then tuned. The

signal processor 100 then provides the demodulated television signal to a television set or VCR or other television signal output device via line 112 (see figures 1-4). Thus, Paik teaches a home interface controller (subscriber terminal 14) wherein the information source means reads on the signal sources 32; the information service distribution network read on cables 16, distribution terminal 12 and cable 18; interactive controller reads on digital switch 40 which switch to different source signal in response to the request service signal from subscriber; data transceiver reads on demodulator 104 and modulator 106; selection input reads on IR receiver 108. It would have been obvious that television communication involves transmission of signals capable of full motion video and provide thereto an information service from the information source means over the network by the signal capable of full motion video in order to increase efficiency of services. However, Paik does not specifically disclose the signals being modified in response to the subscriber interaction.

Hendricks teaches an interactive television system wherein the signals being modified in response to the subscriber interaction (see col. 6, line 11+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Paik to use the teaching of Hendricks in order to improve the signals provided to subscriber.

Regarding claim 2, Paik the data transceiver (demodulator 104 and modulator 106) is operative in a communications link over the network 18 (see figure 3).

Regarding claim 3, Paik discloses the headend terminal 10 operates in coordination with the control signals that are transmitted to the subscriber terminal for enabling reception of only selected frequency channels in the respective subscriber terminal 14, by frequency positioning the television signal indicated by the service request signal received from a given subscriber terminal 14 within the composite signal for transmission to the given subscriber over the given frequency channel enabled by the control signal that is transmitted to the given subscriber terminal 114 (see col. 4, line 45+). Thus, the data communication link is operative at a radio frequency independent of any frequency used for television communication over the network.

Regarding claim 4, Paik teaches the home interface controller (subscriber terminal 14) as discussed in the rejection of claim 1. Paik further teaches directional coupler 92 reads on television input and signal processor 100 reads on signal output as claimed (see figure 4).

Regarding claim 5, Paik teaches the data transceiver is operative in a communication link over network as discussed in the rejection of claim 2.

Regarding claim 6, Paik teaches the data communication link is operative at a radio frequency independent of any frequency used for telecommunication over the network as discussed in the rejection of claim 3.

Regarding claim 7, Paik teaches subscriber terminal 14 reads on the home interface controller as claimed wherein the data transceiver reads on demodulator 104 and modulator 106 for data communication with one of a plurality of headend terminal over a data link in the cable television system; IR receiver 108 reads on the selection input as claimed; directional coupler 92 reads on the television input as claimed; signal processor 100 reads on the signal output as claimed (see figure 4). It is obvious that the signal capable full motion video in order to full motion video service to users. However, Paik does not specifically disclose the subscriber interaction with the interactive process modifies the content of the signal.

Hendricks teaches an interactive television system wherein the subscriber interaction with the interactive process modifies the content of the signal (see col. 6, line 11+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Paik to use the teaching of Hendricks in order to improve the signals provided to subscriber.

Regarding claim 8, Paik teaches programmable FM tuner 96 reads on the tuner as claimed (see figure 4).

Regarding claim 9, Paik teaches signal processor 100 reads on the processor as claimed (see figure 4 and col. 45-49). It is obvious that the compressed signal is decompressed in order to display on the TV screen.

Regarding claim 10, Paik teaches subscriber terminal as discussed in the rejection of claim 7. Paik further teaches the digital switch 40 switches to a source signal correspond to the service request signal (see figure 4). It is obvious to one of ordinary skill in the art that the "interactive process" provides digital full motion video in order to improve data transmission.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lappington et al. (US 5,343,239) teaches transaction based interactive television system.

Freeman (US 5,861,881) teaches interactive computer system for providing an interactive presentation with personalized video, audio and graphics responses for multiple viewers.

Freeman et al. (US 6,252,586) teaches compressed digital data interactive program system.

Young et al. (US 5,809,204) teaches user interface for television schedule system.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P Huynh whose telephone number is 703-305-1889. The examiner can normally be reached on 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is 703-306-0377.

ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Son P. Huynh
September 24, 2003